(Poster)

Assessment of Effective Factors on Radiographic Images Quality in Ardebil's Hospitals

Soheila Refahi[1], Parvin Azarfam[2]

[1]Ardebil University of Medical Sciences, [2]Tabriz University

INTRODUCTION: Radiographic images must have great and ideal quality. They also aspect medical evaluation must be useful, to decrease patient and physician dose. Multi factors effects on radiographic images quality and recipient dose. There is no quality control on radiology equipments in Ardebil's hospitals. Therefore, in this study attempt to using of present facilities know some of these factors to resolve likelihood defects and make high quality images with low recipient dose.

MATERIAL & METHODS: In this study all of mobile and fix radiology tools quality controlled. We assessed light/X-ray field congruence, kvp and exposure time accuracy that effects on density and contrast of radiographic images. An acceptable limit of misalignment of light/X-ray field considered by ±2%, regarding to kvp and exposure time considered by ±4 kvp and ±7%, respectively.

RESULTS: Our results showed that 32.4% of equipments had not light/X-ray field congruence, kvp and exposure time accuracy was unacceptable in 17% and 31.8% of tools.

CONCLUSION: To considering any defect in electronic system could cause mistake in correct action of equipments, in the other hand misalignment of light/X-ray could decrease radiographic images quality and lead to repeat exposure and increasing recipient dose, suggest to performance quality control programs alternatively resulted likelihood defects resolve soon.